UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,543	12/19/2005	Katsuhiko Kyuken	0951-0177PUS1	9378

2292 7590 04/14/2010

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER	
MORRISON, THOMAS A	

ART UNIT	PAPER NUMBER
3653	

NOTIFICATION DATE	DELIVERY MODE
04/14/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/561,543	KYUKEN ET AL.	
	Examiner	Art Unit	
	THOMAS A. MORRISON	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 December 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 11-14* is/are rejected.

7)☒ Claim(s) *8-10* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 11, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,554,275 (Tranquilla) (hereinafter "Tranquilla").

Regarding claim 1, Figs. 3-4 show an image processing apparatus (Fig. 3) comprising:

a paper transport mechanism (including 14) that transports paper, and

an image processing mechanism (col. 5, lines 50-60) that performs image reading processing of the paper transported by the paper transport mechanism (including 14), the mechanism including an optical sensor (72 and 70) operably connected to a working portion of the mechanism (elements 72 and 70 are operably connected to element 14 and col. 5, lines 48-67 explain how control of element 14 causes spacing which is needed for the image processing mechanism. Thus, the optical sensor is operably connected to the image processing mechanism, as claimed), such that upon detection, by the optical sensor (72 and 70), of a multi-feeding incident where a first paper (74 or 76) is transported by the paper transport mechanism (including 14) along with another paper (74 or 76) such that the two papers at least partially overlap,

Regarding the recitation "the working portion of the image processing mechanism performs image reading processing of the first paper **when the optical sensor determines that the other paper is not positioned between the first paper and the working portion of the image processing mechanism**", the bolded portion of this recitation includes "conditional limitations" that need **not** ever occur. For example, if the optical sensor does not determine that the other paper is not positioned between the first paper and the working portion of the image processing mechanism, there is no requirement whatsoever for the working portion of the image processing mechanism to perform image processing as claimed. Since the above-noted recitation includes conditional limitations that need not ever occur, this recitation does not distinguish claim 1 from the prior art apparatus of Tranquilla.

Alternatively, it is noted that the apparatus of Tranquilla detects the positions of the leading and trailing edges of both documents (24 and 26) via elements 70 and 72. Also, col. 5, lines 48-55 disclose that the image processing mechanism is downstream of elements 20 and 22. As such, the image processing mechanism is downstream of the optical sensor (70 and 72) where both documents 24 and 26 are detected. Moreover, this apparatus can read either one of the documents (24 and 26), regardless of whether or not either one of these documents (24 and 26) is located between the other one of these documents (24 and 26) and the image processing mechanism (col. 5, lines 48-55). Accordingly all of the limitations of claim 1 are met by Tranquilla.

Regarding claim 11, col. 5, lines 51-55 disclose that the apparatus comprises at least part of an image processing portion of an optical scanner, copy machine, facsimile

machine, or multi-function machine combining any two or more of the scanner, copy machine, and fax.

Regarding claim 13, Figs. 3-4 disclose an original reading method comprising:

transporting a first original document (24) with an original transport mechanism (including 14),

reading an image of the transported original document (24) with an original reading mechanism (col. 5, lines 50-60),

detecting (via 70 and 72), during the transporting, a multi-feeding incident where another original document (26) is transported during the transporting such that both documents (24 and 26) at least partially overlap, where detecting includes determining relative positions of the first and other original documents (24 and 26).

Regarding the recitation "continuing said reading an image **if determining indicates that the other original document is not positioned between the first original document and the reading portion of the original reading mechanism**", the bolded portion of this recitation includes "conditional limitations" that need **not** ever occur. For example, if the determining does not ever indicate that the other original document is not positioned between the first original document and the reading portion of the original reading mechanism, there is no requirement whatsoever for performing continuing of the reading of an image as claimed. Since the above-noted recitation includes conditional limitations that need not ever occur, this recitation does not distinguish claim 13 from the prior art apparatus of Tranquilla.

Alternatively, it is noted that the apparatus of Tranquilla detects the positions of the leading and trailing edges of both documents (24 and 26) via elements 70 and 72. Also, col. 5, lines 48-55 disclose that the reading mechanism is downstream of elements 20 and 22. As such, the reading mechanism is downstream of the optical sensor (70 and 72) where both documents 24 and 26 are detected. Moreover, this apparatus can read either one of the documents (24 and 26), regardless of whether or not either one of these documents (24 and 26) is located between the other one of these documents (24 and 26) and the reading mechanism (col. 5, lines 48-55). Accordingly all of the limitations of claim 13 are met by Tranquilla.

Regarding claim 14, Figs. 3-4 disclose an original reading method comprising:

transporting a first original document (24) with an original transport mechanism (including 14),

reading an image of the transported original document (24) with an original reading mechanism (col. 5, lines 50-60),

detecting (via 72 and 70), during the transporting, a multi-feeding incident where another original document (26) is transported during the transporting such that both documents (24 and 26) at least partially overlap, where detecting (via 72 and 70) includes determining relative positions of the first and other original documents (24 and 26).

Regarding the recitation "altering said reading operation to read an image of the other original document **if determining indicates that the other original document is positioned between the first original document and the reading portion of the**

original reading mechanism", the bolded portion of this recitation includes "conditional limitations" that need **not** ever occur. For example, if the determining does not ever indicate that the other original document is positioned between the first original document and the reading portion of the original reading mechanism, there is no requirement whatsoever for altering the reading operation as claimed. Since the above-noted recitation includes conditional limitations that need not ever occur, this recitation does not distinguish claim 14 from the prior art apparatus of Tranquilla.

Alternatively, it is noted that the apparatus of Tranquilla detects the positions of the leading and trailing edges of both documents (24 and 26) via elements 70 and 72. Also, col. 5, lines 48-55 disclose that the reading mechanism is downstream of elements 20 and 22. As such, the reading mechanism is downstream of the optical sensor (70 and 72) where both documents 24 and 26 are detected. Moreover, this apparatus can read either one of the documents (24 and 26), regardless of whether or not either one of these documents (24 and 26) is located between the other one of these documents (24 and 26) and the reading mechanism (col. 5, lines 48-55). Accordingly all of the limitations of claim 14 are met by Tranquilla.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2-7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tranquilla in view of U.S. Patent Publication No. 2003/0090050 (Sueoka) (hereinafter "Sueoka"), and further in view of U.S. Patent No. 6,731,393 Currans et al.) (hereinafter "Currans").

Regarding independent claim 2, Figs. 3-4 of Tranquilla show an original reading apparatus comprising:

an original transport mechanism (including 14), the mechanism having a movable member (14) that transports an original document placed on a document placement stage (Fig. 1), and

an original reading mechanism (col. 5, lines 50-60) ,

wherein the moveable member (14) transports a first original document (78) by making contact with the first original document (78) and delivers it to the reading mechanism (col. 5, lines 50-60) by transmitting its movement to the first original document (78) via frictional force in a manner such that upon detection, by an optical sensor (70 and 72), of a multi-feeding incident where the first original document (78) is transported along with another original document (80) such that the two documents (78 and 80) at least partially overlap,

the reading operation of the image of the first original document (78) by the original reading mechanism (col. 5, lines 50-60) continues if the optical sensor (70 and 72) determines that the other original document (80) is not positioned between the first original document (24) and a reading portion of the original reading mechanism (col. 5, lines 50-60). In particular, the apparatus of Tranquilla detects the positions of the leading and trailing edges of both documents (78 and 80) via elements 70 and 72. Also, col. 5, lines 48-55 disclose that the reading mechanism is downstream of elements 20 and 22. As such, the reading mechanism is downstream of the optical sensor (70 and 72) where both documents 78 and 80 are detected. Moreover, this apparatus can continue to read either one of the documents (78 and 80), regardless of whether or not either one of these documents (78 and 80) is located between the other one of these documents (78 and 80) and the reading mechanism (col. 5, lines 48-55).

Alternatively, it is noted that in the recitation "the reading operation of the image of the first original document by the original reading mechanism continues **if the optical sensor determines that the other original document is not positioned between the first original document and the reading portion of the original reading mechanism**", the bolded portion of this recitation includes "conditional limitations" that need **not** ever occur. For example, if the optical sensor does not ever determine that the other original document is not positioned between the first original document and the reading portion of the original reading mechanism, there is no requirement whatsoever for continuing to the reading operation as claimed. Since the above-noted

recitation includes conditional limitations that need not ever occur, this recitation does not distinguish claim 2 from the prior art apparatus of Tranquilla.

Tranquilla discloses most of the limitation of claim 2, including an original reading mechanism (col. 5, lines 50-60), but Tranquilla does not explicitly disclose that such original reading mechanism (col. 5, lines 50-60) has a light source, an optical sensor and an optical system as claimed. Also, Tranquilla does not explicity disclose that the same optical sensor of the original reading mechanism is also used to detect the multi-feeding incident (i.e., a miss-feed), as now set forth in claim 2.

Regarding independent claim 4, Figs. 3-4 show an original reading apparatus comprising:

an original transport mechanism (including 14), the mechanism having a movable member (14) that transports an original document (78) placed on a document placement stage (Fig. 4), and

an original reading mechanism (col. 5, lines 50-60),

wherein the moveable member (14) transports a first original document (78) by making contact with the first original document (78) and delivers it to the reading mechanism (col. 5, lines 50-60) by transmitting its movement to the first original document (78) via frictional force in a manner such that upon detection, by an optical sensor (70 and 72) of a multi-feeding incident where the first original document (78) is transported along with another original document (80) such that the two documents at least partially overlap.

Regarding the recitation "the reading operation of the image of the first original document by the original reading mechanism is stopped **if the optical sensor detects that the other original document is positioned between the first original document and the reading portion of the original reading mechanism**", the bolded portion of this recitation includes "conditional limitations" that need **not** ever occur. For example, if the optical sensor does not ever detect that the other original document is positioned between the first original document and the reading portion of the original reading mechanism, there is no requirement whatsoever for stopping the reading operation as claimed. Since the above-noted recitation includes conditional limitations that need not ever occur, this recitation does not distinguish claim 4 from the prior art apparatus of Tranquilla.

Tranquilla discloses most of the limitation of claim 4, including an original reading mechanism (col. 5, lines 50-60), but Tranquilla does not explicitly disclose that such original reading mechanism (col. 5, lines 50-60) has a light source, an optical sensor and an optical system as claimed. Also, Tranquilla does not explicity disclose that the same optical sensor of the original reading mechanism is also used to detect the multi-feeding incident (i.e., a miss-feed), as now set forth in claim 4.

Regarding independent claim 5, Figs. 3-4 show an original reading apparatus comprising:

an original transport mechanism (including 14), the mechanism having a movable member (14) that transports an original document placed on a document placement stage (Fig. 4), and

an original reading mechanism (col. 5, lines 50-60),

wherein the moveable member (14) transports a first original document (78) by making contact with the first original document (78) and delivers it to the reading mechanism (col. 5, lines 50-60) by transmitting its movement to the first original document (78) via frictional force in a manner such that upon detection, by an optical sensor (70 and 72), of a multi-feeding incident where the first original document (78) is transported along with another original document (80) such that the two documents (78 and 80) at least partially overlap,

the reading operation of the image of the other original document (78) by the original reading mechanism (col. 5, lines 50-60) proceeds if the optical sensor (70 and 72) detects that the other original document (80) is positioned between the first original document (78) and a reading portion of the original reading mechanism (col. 5, lines 50-60). In particular, the apparatus of Tranquilla detects the positions of the leading and trailing edges of both documents (78 and 80) via elements 70 and 72. Also, col. 5, lines 48-55 disclose that the reading mechanism is downstream of elements 20 and 22. As such, the reading mechanism is downstream of the optical sensor (70 and 72) where both documents 78 and 80 are detected. Moreover, this apparatus can proceed to read either one of the documents (78 and 80), regardless of whether or not either one of these documents (78 and 80) is located between the other one of these documents (78 and 80) and the reading mechanism (col. 5, lines 48-55).

Alternatively, it is noted that in the recitation “the reading operation of the image of the other original document by the original reading mechanism proceeds **if the**

optical sensor detects that the other original document is positioned between the first original document and a reading portion of the original reading mechanism", the bolded portion of this recitation includes "conditional limitations" that need **not** ever occur. For example, if the optical sensor does not ever detect that the other original document is positioned between the first original document and the reading portion of the original reading mechanism, there is no requirement whatsoever for the reading operation to proceed as claimed. Since the above-noted recitation includes conditional limitations that need not ever occur, this recitation does not distinguish claim 5 from the prior art apparatus of Tranquilla.

Tranquilla discloses most of the limitation of claim 5, including an original reading mechanism (col. 5, lines 50-60), but Tranquilla does not explicitly disclose that such original reading mechanism (col. 5, lines 50-60) has a light source, an optical sensor and an optical system as claimed. Also, Tranquilla does not explicity disclose that the same optical sensor of the original reading mechanism is also used to detect the multi-feeding incident (i.e., a miss-feed), as now set forth in claim 5.

With regard to independent claims 2, 4 and 5, Sueoka provides a general teaching that it is well known in the art to provide an original reading apparatus with an original reading mechanism (including 121 and 131-133) that includes a light source (132) that illuminates an original, an optical sensor (121), and an optical system (including 131 and 133) that guides light reflected from the original illuminated by the light source (132) to the optical sensor (121), and that captures an image of the original transported by the original transport mechanism (including 131 and 133), for the

purpose of reading the image surface of a sheet-shaped document. See, e.g., numbered paragraph [0038] of Suioka. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of Tranquilla with an original reading mechanism that has a light source, an optical sensor and an optical system for the purpose of reading the image surface of a sheet-shaped document, as taught by Sueoka.

Tranquilla in view of Sueoka discloses all of the limitations, except for the fact that this combination teaches one optical sensor for detecting a multi-feed incident and another optical sensor for reading images in an original reading device. However, Currans discloses that it is well known in the art to provide an original reading apparatus (Figs. 22(A) and 22(B)) with an optical sensor for the purpose of capturing images and also detecting miss-feeds. See, e.g., Figs. 22(A)-22(B) and col. 20, lines 17-30 of Currans. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the same optical sensor in the original reading mechanism taught by Sueoka to capture the image of the original document and also detect a multi-feed incident (miss-feed), because this use of a single optical sensor device to perform both functions eliminates the need for separate inspection and image reading sections and simplifies the overall device. Thus, all of the limitations of independent claims 2, 4 and 5 are met by the cited combination of references.

Regarding dependent claim 3, Figs. 3-4 of Tranquilla show that the original transport mechanism (including 14) includes a structure having a plurality of document pages placed on the document placement stage (Fig. 4) face downward such that the

moveable member (14) supplies and transports the document pages page by page beginning with the bottom page.

Regarding dependent claim 6, Figs. 3-4 of Tranquilla show that the original transport mechanism (including 14) includes a structure having a plurality of document pages that have been placed on the document placement stage (Fig. 4) face upward such that the moveable member (14) supplies and transports the document pages page by page beginning with the bottom page.

Regarding dependent claim 7, Figs. 3-4 of Tranquilla show that the optical sensor (70 and 72) detects the leading edge of the other original document (80) while the first original document (78) is illuminated.

Regarding dependent claim 12, col. 5, lines 50-60 disclose that the apparatus comprises at least part of a document reading portion of an optical scanner, copy machine, facsimile machine, or multi-function machine combining any two or more of said scanner, copy machine, and fax.

Allowable Subject Matter

3. Claim 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See

MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS A. MORRISON whose telephone number is (571)272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on (571) 272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Saúl J. Rodríguez/
Supervisory Patent Examiner, Art Unit 3652

4/10/2010